

## CLAIMS

I claim:

1. An automatically loading pole syringe, comprising:
  - a. a syringe pole having a length between a first end and a second  
5 end;
  - b. a grip affixed to the first end;
  - c. an automatically loading syringe needle assembly affixed to the  
second end of the syringe pole;
  - d. a bottle mount for mounting a medicine bottle to the syringe pole;
  - e. a medicine delivery tube having a first tube end and a second tube  
10 end, the first tube end adapted for connection to the medicine  
bottle and the second tube end connected to the syringe needle  
assembly; and
  - f. an ink carriage for carrying an ink source, the ink carriage oriented  
15 to allow the ink source to discharge ink in a direction proximal to a  
needle carried by the syringe needle assembly.
2. The automatically loading pole syringe of claim 1, wherein the length of  
the syringe pole is adjustable.
3. The automatically loading pole syringe of claim 1, wherein the syringe  
20 needle assembly contains an interchangeable volume component.

4. An automatically loading pole syringe, comprising
- a. a syringe pole having a length between a first end and a second end;
  - b. a grip proximal to the first end;
  - 5 c. an automatically loading syringe needle assembly removably attached to the second end of the syringe pole;
  - d. a bottle mount for mounting a medicine bottle to the syringe pole; and
  - 10 e. a medicine delivery tube having a first tube end and a second tube end, the first tube end adapted for connection to the medicine bottle and the second tube end connected to the syringe needle assembly.
5. The automatically loading pole syringe of claim 5, further comprising an ink carriage for carrying an ink source, the ink carriage oriented to allow
- 15 the ink source to discharge ink in a direction proximal to a needle carried by the syringe needle assembly.
6. The automatically loading pole syringe of claim 5, wherein the length of the syringe pole is adjustable.

